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CALIFORNIA PUBLIC OPINION AND BEHAVIOR REGARDING THE CALIFORNIA DESERT

A Report of a Survey Conducted for

United States Department of the Interior
Bureau of Land Management

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"FieldScope"

Field Research Corporation

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CONTENTS

INTRODUCTION i

SUMMARY. ii

Chapter I. THE PUBLIC'S EXPOSURE TO THE CALIFORNIA DESERT

A. Proportion of Public Who Have Visited Desert . . . 1
B. Factors Which Restrict Use of Desert 5
C. Length of Stay and Money Spent 9

Chapter II. ACTIVITIES ENGAGED IN BY USERS OF THE CALIFORNIA DESERT

A. Activities of Recent Visitors. 11
B. Activities by Region Visited 15
C. Activity Groupings 18
D. Characteristics of Desert Use. 22
E. Changes in Activity Patterns Since Two Years Ago . 24
F. Expected Behavior Three Years Hence. 24

Chapter III. ATTITUDES ABOUT THE QUALITY OF THE DESERT EXPERIENCE

A. Activities People Find Objectionable 26
B. What People Want More Of or Less Of in the Desert. 28
C. Factors Which Affect Scenic Enjoyment. 32
D. Adjectives Chosen to Describe the Desert Experience 34
E. What People Fear About the Desert. 35

Chapter IV. COMPARISON WITH RESULTS OF 1975 SURVEY

A. Visits to the Desert 36
B. Activities in the Desert 37
C. Activities and Features Liked and Disliked 40

APPENDICES

A. HOW THE SURVEY WAS CONDUCTED
B. THE QUESTIONNAIRE
C. DESERT MAP

INTRODUCTION

This report contains the findings of a series of questions administered to a cross-section of the California adult public regarding their use of the California Desert and their attitudes regarding certain kinds of uses and features of the desert.

The survey was conducted during the period from September 23 to October 10, 1977. During that period, a sample consisting of 1,058 persons 18 years of age and older were interviewed in person, in their homes. A description of the sample design and the method of the survey are contained in the Appendix.

The questions for this survey were developed by the Bureau of Land Management, and were pretested by Field Research Corporation prior to being administered as part of an omnibus questionnaire survey being conducted under the auspices of "FieldScope", a quarterly statewide cross-section survey operated by Field Research Corporation.

The survey data were processed and computer tabulated by Field Research Corporation. The report which follows contains a summary analysis of the major findings of the survey, prepared by Field Research Corporation.

CALIFORNIA DESERT SURVEY

SUMMARY OF FINDINGS

-- 35% of the California adult public say they have engaged in some recreational activities in the California Desert within the past year or so.

-- Of those who have engaged in recreational activities in the Desert:

50% said they had visited one or more of the national, state, or county parks

26% said they had visited some part of the Colorado River

17% said they had visited the Salton Sea

27% said they had visited some part of the remaining lands administered by the BLM

37% said they had spent one or more days in one of the towns, urban areas, or military installations in the Desert areas.

-- The California Desert is frequented by people of all age groups, but is most frequently and actively used by younger people.

-- The chief factors inhibiting more use of the Desert are its distance and the cost in time, travel, and equipment to go there.

-- Visitors to the Desert engage in a wide variety of activities, ranging from sightseeing to sand sailing.

- Males predominate in photography, and in sports such as hunting, target shooting, backpacking, and rock climbing.

- Women predominate among horseback riders and picnickers

- Young people are a majority of those engaging in rock climbing, motorcycle riding, horseback riding, and backpacking

- People over 60 are most often found among those doing rock and mineral collecting, birdwatching, driving and sightseeing, picnicking, and educational activities

- Highly educated people do more birdwatching, photography, exploring, rock climbing, target shooting, and camping in undeveloped campsites.

-- The things which the most people object to in the Desert include the following:

- Motorcycle riding (competitive or non-competitive)
- Dunebuggying
- Target shooting
- Hunting
- Four wheel driving.

-- Nearly everyone is united in wanting to see more of these things in the California Desert:

- Protection of desert wildlife
- Protection of desert scenery and natural character
- Protection of areas of historic and archeological significance.

-- Also strongly favored with little or no opposition are such things as:

- More developed campgrounds
- More control over public use of the desert
- More primitive areas
- Educational and interpretive programs.

-- Energy development on the Desert is approved by a plurality, but also encounters considerable resistance. Mining is more opposed than favored, although most people have no opinion at this time.

-- Organized recreational facilities are generally approved, but a significant minority of people are opposed.

-- More commercial development in the Desert is vetoed by the largest number of people, although a significant minority would like to see more commercial development.

-- Most people believe that scenic values in the Desert are adversely affected by nearly all man-made structures except mountain top communications facilities. Grazing is felt to have no effect, or even a slight positive effect.

-- The things most feared in the Desert in order of the number of people expressing concern are:

- Car breakdown
- Unexploded military shells and bombs
- Flash floods
- Unfenced, abandoned mine shafts
- Snakes and insects.

-- The findings of this survey support and amplify the findings of a similar survey conducted in California for the BLM in 1975.

I.

THE PUBLIC'S EXPOSURE TO THE CALIFORNIA DESERT

A. Proportion of Public Who Have Visited Desert

Among adults statewide, 45% claim to have visited some part of the California Desert in the recent past, but just 35% have engaged in specific recreational activities on the Desert. These figures are based on the responses of a cross-section of 1,058 persons 18 years of age and older who were shown a map of the Desert region (see map in Appendix), and who were asked whether they had, within the past year, engaged in any of a list of twenty-six different activities described on a list which was handed to them.

Later in the questionnaire, those who said they had visited the Desert and who had done any of the activities listed were then asked to indicate on the map which of five different regions of the Desert they had visited. Of those who said they had visited the Desert and engaged in any of the activities, 51% said they had been to one or more of the national parks located in the Desert region (e.g., Death Valley, Joshua Tree, Anza-Borrego); 38% said they had spent one or more days in one or the other of the various towns, urban areas, or military bases in the Desert; 28% claimed to have been in some portion of the remaining Desert lands managed by the BLM; 26% said they had visited some section of the Colorado River; and 16% said they had been at the Salton Sea.

These data establish the fact that there is a fairly high level of public exposure to the California Desert within the recent past among the population of this state. Caution should be observed, however, in relating these figures to actual attendance data because of inherent inaccuracies in questionnaire survey responses of this kind. For example, although respondents were provided with the time reference of "within the past year", this does not guarantee that all respondents actually reported only experiences within the past year. A memorable trip to the desert which took place several years ago could well have been reported by some respondents who were anxious to describe an experience that was particularly significant for them. Others may have interpreted the time frame loosely to mean "the past year or so". And others may have overlooked brief trips to the region. The net effect of these factors is probably to produce some overstatement of the number of visitors during the past year. There is little question that those who said they had visited the Desert very probably actually have done so; what is in doubt is the specific time period within which the visit occurred. The proper definition of the time period of visits represented by the survey data should probably be "the past year or so."

Visitors to the Desert come disproportionately from the Southern California regions of the state: 54% of the people interviewed in southern counties outside the LA Metro area said

they had done activities in the Desert, and 43% of those from the Los Angeles/Orange County area said they had. On the other hand, just 17% - 19% of Northern Californians said they had visited the Desert in the recent past and engaged in activities there. (Southern California as used here includes the counties of Los Angeles, Orange, San Diego, Ventura, Santa Barbara, San Bernardino, Riverside, and Imperial; all others are classified as Northern California. Interviews were conducted in 120 primary sampling locations throughout the state distributed in proportion to population density. See Appendix for description of sampling method.)

By age, overall visitorship to the Desert is somewhat more frequent among younger age groups than among older people, but the differences are not great -- 52% of the people 18 - 24 years of age had been to the Desert recently, but 40% of those 60 and older also had done so. When it comes to recreational activities in the Desert, however, there is a more pronounced age difference -- whereas nearly 40% of the people under 50 years of age said they had engaged in one or more of the specified recreational activities in the Desert, only 22% to 26% of those 50 and older had done so.

State, national, and county parks are relatively more heavily used by people in the middle age range between 30 and 60 years. The Salton Sea area is more frequently visited by persons in the 50 and older age range than it is by younger persons. On

the other hand, towns and urban areas are relatively more often visited for recreation by people under 40 years of age. The Colorado River area and BLM-administered lands are utilized by all age groups.

TABLE I-1

VISITORSHIP TO VARIOUS AREAS OF THE CALIFORNIA DESERT REGION, BY AREA OF RESIDENCE AND AGE

	Have been to Desert in past year	Have engaged in any activities	Percent of those visiting Desert and engaging in activities who have visited-- Salton Sea	Colorado River	National, state, county parks (a)	Towns, urban areas (b)	Other areas (c)
Statewide adult public	45%	35%	16%	26	51	38	28
Los Angeles Metro Area	53%	48%	15%	28	47	41	33
Other Southern California	69%	54%	23%	30	60	29	23
San Francisco Bay Area	28%	19%	16%	19	53	35	22
Other Northern California	29%	17%	8%	18	42	45	21
18 - 24	52%	46%	12%	26	37	38	35
25 - 29	45%	35%	10%	21	46	40	34
30 - 39	47%	42%	17%	25	59	48	26
40 - 49	42%	36%	10%	35	64	32	23
50 - 59	43%	26%	23%	32	59	30	21
60 and older	40%	22%	32%	21	43	31	24

NOTE: percentages read across the table. Rows add to more than 100% because some people reported having visited more than one place.

(a) E.g., Death Valley, Joshua Tree, Anza-Borrego.
(b) Towns, urban areas, private developments, military bases
(c) Public lands administered by Bureau of Land Management. (See map in Appendix for definition of these areas.)

B. Factors Which Restrict Use of Desert

The chief factors which inhibit more use of the Desert are its distance, and the cost in time, travel, and equipment to go there. These reasons are cited most prominently by both

those who have already been there and those who have not as the factors which restrict their use of the desert. Many people also cited competing interests and obligations.

Table I-2 shows the check-list of possible reasons for restricting one's use of the Desert that was presented to respondents, arranged in the rank order in which each reason was chosen by respondents as applicable to themselves. Many people selected more than one reason. There is generally close correspondence between the responses of visitors and non-visitors to the Desert, although non-visitors somewhat more often cite competing interests and obligations, or indicate that they have a low personal interest in the Desert.

TABLE I-2

FACTORS WHICH PEOPLE CITE AS RESTRICTING THEIR USE OF THE CALIFORNIA DESERT

Factors which restrict use:	Have visited Desert in past year or so	Have not visited Desert recently
Distance to travel	42%	44%
Cost of time, travel, equipment	38	38
More important personal interests and obligations	30	38
Low personal interest in the California Desert	15	24
Conflicts with other recreationists	16	6
Opportunities to do the same things elsewhere	10	8
Regulations on the use of public lands	11	6
Other factors	6	6
Don't know, can't say	5	8

NOTE: Percentages add to more than 100% because of multiple responses.

It is significant that "low interest" is cited as a reason by only 24% of non-visitors; this would suggest that it is principally distance, cost, and time which inhibits even greater use of the Desert for recreation. It is also significant that very few visitors to the Desert (about 11%) name restrictive regulations as the reason why they do not use the Desert more. A more important inhibition on use for Desert visitors is "conflicts with other recreationists", mentioned by 16%. This was not probed with further questioning, but it presumably relates to difficulties people have experienced due to the presence of other recreationists. The particular values which people seek in the Desert are discussed further in Chapter III.

Problems of distance, time, and cost are about twice as often cited by Northern California residents as they are by persons in the southern part of the state, as would be expected in view of the geographic location of the Desert. People in the southern counties outside of the Los Angeles/ Orange County Metro Area were the least inhibited by distance and time; they also were the ones most likely to mention conflicts with other recreationists. (See Table I-3, below.)

By age, the people most concerned about distance, time, and cost were the youngest respondents -- those between 18 and 24 years of age. Over half of this group mentions each of these two reasons as inhibitions, and many of them also cite

competing interests as well. The importance of distance as an obstacle decreases markedly among persons 30 years of age and older. Cost and time are also less important barriers to use of the Desert for older people than they are for young persons. Table I-3 shows the percentages of each age group choosing each of the various possible restricting factors.

TABLE I-3

FACTORS RESTRICTING DESERT USE,
BY AREA OF RESIDENCE AND AGE

	Percent mentioning these as factors which restrict Desert use:						
	Distance	Time, cost	Other interests	Low interest	Conflicts with others	Can do elsewhere	Regulations
Statewide adult public	43%	38	34	20	10	9	8
LA Metro Area	35%	38	35	21	9	11	10
Other Southern California	27%	25	34	17	19	9	8
S.F. Bay Area	61%	43	36	20	10	8	7
Other Northern California	54%	42	31	22	7	9	7
18 - 24	51%	51	43	12	10	7	11
25 - 29	50%	35	36	14	12	11	6
30 - 39	42%	41	36	22	12	10	9
40 - 49	38%	29	39	20	12	15	12
50 - 59	40%	40	30	27	13	8	8
60 and older	38%	29	23	24	5	6	4

NOTE: percentages read across table. Rows add to more than 100% because some people reported more than one restriction.

C. Length of Stay and Money Spent

The typical length of stay for recreational purposes reported by persons who said they had done activities in the Desert region recently was about three days. There is wide variance in visitors' lengths of visits, however; the largest number of people stay only one or two days, but a sizable group report stays of ten or more days, especially in the case of those visiting BLM-administered lands.

TABLE I-4

NUMBER OF DAYS REPORTED SPENT FOR RECREATIONAL PURPOSES IN VARIOUS SECTIONS OF THE CALIFORNIA DESERT

Number of days spent in recent past for recreational purposes in the area:	Areas of the Desert				
	Salton Sea	Colorado River	National, state, county parks *(a)*	Towns, urban areas *(b)*	Other areas *(c)*
One	26%	15%	20%	25%	22%
Two	23	14	13	20	23
Three	27	27	18	10	11
Four	2	9	12	7	9
Five	4	10	3	6	5
Six	4	*	10	6	4
Seven	8	8	5	7	3
Eight	-	*	2	2	-
Nine	-	1	*	1	-
Ten or more	5	16	17	16	23
Mean no. days	3.6	6.0	6.3	6.8	7.5
Median no. days	3.0	3.1	3.3	3.5	3.1

(a) E.g., Death Valley, Joshua Tree, Anza-Borrego.
(b) Towns, urban areas, private developments, military bases
(c) Public lands administered by Bureau of Land Management. (See map in Appendix for definition of these areas.)

* *Less than 0.5%.*

When asked to report how much money they had spent in the various areas for food, gasoline, lodging or recreational purposes, the typical active visitor reported amounts ranging between $34 and $48, except for visitors to the Colorado River region, where the typical expenditure amount was reported as about $100. Table I-5 below shows the distribution of reported expenditures, by region.

TABLE I-5

AMOUNTS OF MONEY REPORTED SPENT
ON RECREATIONAL ACTIVITIES WHILE IN VARIOUS SECTIONS OF THE CALIFORNIA DESERT

Expenditures in recent past for recreational purposes in the area:	Areas of the Desert				
	Salton Sea	Colorado River	National, state, county parks *(a)*	Towns, urban areas *(b)*	Other areas *(c)*
Under $10	23%	17%	19%	13%	20%
$10.00 - $19.99	9	6	6	9	13
$20.00 - $29.99	12	9	15	14	13
$30,00 - $49.99	8	8	10	15	14
$50.00 - $99.99	19	8	15	17	11
$100.00 - $199.99	14	17	20	8	9
$200.00 - $399.99	6	15	6	11	14
$400.00 and over	2	16	7	8	3
Don't know	7	4	2	5	3
Median amount spent	$36	$100	$48	$45	$34

(a) E.g., Death Valley, Joshua Tree, Anza-Borrego.
(b) Towns, urban areas, private developments, military bases.
(c) Public lands administered by Bureau of Land Management. (See map in Appendix for definition of these areas.)

II.

ACTIVITIES ENGAGED IN BY USERS OF THE CALIFORNIA DESERT

A. Activities of Recent Visitors

Respondents in the survey who said that they had visited the Desert "within the past year", i.e., within the recent past, were then asked to indicate from a list of twenty-six activities which of those they had engaged in. Table II-1 shows the percentages of Desert visitors claiming to have done each of the listed activities. About one in four said they had been in the Desert area but had not engaged in any activities. However, nearly half (46%) of all Desert visitors said they engaged in "sightseeing and driving for pleasure on paved roads." Another one-third (32%) said they had done "sightseeing and exploring" (this could presumably be on dirt roads, trails, or cross-country, and would include foot travel as well as other modes).

"Picnicking" is also a frequent activity, being reported by 31% of those visitors interviewed. Camping is also quite requently reported -- 29% in developed campgrounds, and 23% at undeveloped sites.

"Hiking" is reported by 24%; "backpacking" by 14%; "rock climbing" by 14%; and "horseback riding" by 8%.

"Photography" is engaged in by 24%; "rock and mineral collecting" by 9%; "birdwatching" by 4%; "prospecting as a hobby" by 3%; "painting" by 3%; and "scientific research" by 1%.

"Hunting" (7%) and "target shooting" (12%) are quite frequently reported.

"Motorcycle riding (non-competitive)" is an activity of many (14%); "four-wheel driving" is reported by 8%; "dunebuggying" by 6%; and "sand sailing", "hang gliding", and "competitive motorcycle riding" are cited by 1% each.

Twelve percent said they had engaged in "water based activities on the Colorado River" and 6% said they had done "water based activities on the Salton Sea." Twenty-three percent of those who had been Desert visitors said they had done none of the things on the list. Presumably they had engaged in other recreations or activities.

When asked to name their "primary" activity on the Desert, people name a wide variety of things. The largest single group (13%) named "sightseeing and pleasure driving on roads". "Camping in developed campgrounds" is next most often cited (10%). Remaining mentions as primary activity are distributed fairly proportionately across the remaining items on the list of activities. (See Table II-1.)

Persons who had named one or more activities were also asked to indicate whether there were any other things on the list that they hadn't done but would like to do. It appears that there is considerable latent desire among present visitors to do such things as horseback riding, water-based activities on the Colorado River, backpacking, prospecting (hobby), and for dunebuggying, sand sailing, and hang gliding. (These are activities for which the number expressing a desire to do them equals or exceeds the number presently doing. See Table II-1.)

Persons who said they had <u>not</u> been to the Desert in the recent past, were asked whether there were any things on the list that they would like to do. Their responses present a generally similar pattern to the present and desired activities of visitors. They, too, show an unusually strong desire to do "horseback riding". (See Table II-1.)

TABLE II-1

DESERT ACTIVITIES ENGAGED IN AND DESIRED,
BY VISITORS AND NON VISITORS TO THE DESERT

Activities:	Activities engaged in by those visiting the California Desert within past year or so			Have not visited Desert in past year or so -- would like to do this
	Have done	Primary activity	Haven't done, would like to	
Sightseeing and driving for pleasure on paved roads	46%	13%	8%	21%
Sightseeing and exploring	32	8	14	27
Picnicking	31	2	11	17
Camping in developed campground	29	10	14	20
Hiking	24	3	11	17
Photography	24	4	15	18
Camping at undeveloped sites	23	6	12	12
Rock climbing	14	*	6	6
Motorcycle riding (non-competitive)	14	4	6	9
Backpacking	14	1	14	12
Water based activities on Colorado River	12	4	15	13
Target shooting	12	1	4	6
Educational activities	11	1	6	9
Rock and mineral collecting	9	2	8	11
Four wheel driving	8	2	7	6
Horseback riding	8	2	15	16
Hunting	7	1	6	10
Dunebuggying	6	1	9	9
Water based activities on Salton Sea	6	2	6	6
Birdwatching	4	*	5	5
Painting	3	*	3	4
Prospecting as a hobby	3	*	6	5
Scientific research	1	1	2	4
Motorcycle riding (competitive)	1	*	1	2
Sand sailing	1	-	5	4
Hang gliding	1	*	7	3
None of these activities	23	21	24	37

NOTE: Activities (except primary) add to more than 100% because of multiple responses.

** Less than 0.5%.*

31% — Correction - phone 2-9-79 BB

Visitors to BLM-administered lands in the Desert report higher overall levels of use of: sightseeing and exploring, camping in developed and undeveloped campgrounds, hiking, rock climbing, non-competitive motorcycle riding, backpacking, educational activities, four-wheel driving, hunting, and dune-buggying.

People who have visited the towns, urban areas, and privately developed areas of the Desert more often report having done these activities: sightseeing on paved roads, picnicking, hiking, and horseback riding.

These correlations do not necessarily prove the prevalence of certain activities in each Desert region (many people have visited more than one region and so their activity can get counted in several locations), but it is helpful in suggesting likely differentials in activity patterns.

Table II-2

OVERALL DESERT ACTIVITIES ENGAGED IN, BY AREAS OF THE DESERT VISITED FOR ONE OR MORE DAYS

Activities done in Desert in past year or so	Have spent one or more days in this area of Desert: Salton Sea	Colorado River	Natn'l. State, co. parks (a)	Towns, urban areas (b)	Other areas (c)
Sightseeing and driving for pleasure on paved roads	55	71	64	67	61
Sightseeing and exploring	44	56	50	50	54
Picnicking	48	44	43	54	50
Camping in developed campground	64	52	52	42	56
Hiking	33	33	42	38	41
Photography	31	45	39	30	32
Camping at undeveloped sites	35	38	41	36	52
Rock climbing	15	21	27	21	26
Motorcycle riding (non-competitive)	18	28	16	20	35
Backpacking	18	25	26	20	23
Water based activities on Colorado River	18	48	16	16	21
Target shooting	16	17	18	16	18
Educational activities	19	16	18	16	23
Rock and mineral collecting	14	14	12	11	15
Four wheel driving	18	20	9	13	19
Horseback riding	10	20	10	17	14
Hunting	16	11	13	10	14
Dunebuggying	14	14	8	8	16
Water based activities on Salton Sea	36	10	8	6	12
Birdwatching	9	9	6	5	3
Painting	5	3	5	4	7
Prospecting as a hobby	1	5	5	6	6
Scientific research	5	1	3	2	2
Motorcycle riding (competitive)	1	3	1	1	3
Sand sailing	3	3	2	*	1
Hang gliding	-	-	2	-	2

* *Less than 0.5%*

c. Activity Groupings

Among the activities listed on the card presented to respondents, there are some that can be seen as representing services or facilities that are facilitative to other activities, while others are activities that are engaged in primarily as ends in themselves and that require the use of certain facilities, modes of travel, etc. Examples of facilitative type services would be campgrounds, roads, trails, educational facilities, backpacking or hiking, and four-wheel driving.

The major "activity type" elements, include photography, rock climbing, rock and mineral collecting, etc. Those that were mentioned as activities engaged in by more than 4% of the presons who said they had visited the Desert are shown as column headings in Table II-3. In the rows of Table II-3 are shown the various facilitative services. The figures in the table indicate the percentage of people engaging in the indicated activity who also said they had used each of the facilitative services. (Certain activities, such as hiking, backpacking, and four wheel driving are shown both as activities and as facilitative services because they may be engaged in for both types of reasons.)

For example, people who engage in hiking also frequently use developed or undeveloped campgrounds, they frequently picnic, and fairly often engage in educational activities. They relatively

seldom use four-wheel drive, or engage in target shooting. The majority of them do sightseeing and exploring (on trails or unpaved roads), and also use paved roads for sightseeing and pleasure driving.

Photographers, on the other hand, less often utilize campgrounds, and more often do their sightseeing on paved roads. Only about half of the people doing photography as an activity say they also hike, and only one-third backpack. Very few of them do target shooting or drive four-wheel vehicles.

Rock climbers and backpackers are both frequent users of campgrounds of both types, and relatively often have four-wheel drive vehicles. About one-third of them say they also do target shooting, and they rather often say they are also involved in educational activities.

Hunters very often use developed campgrounds, and also often use undeveloped ones. Nearly half of them hike and/or backpack, and relatively few use four-wheel drive vehicles. Many of them also do target shooting. Target shooters, on the other hand, are less often found in campgrounds than most other Desert users are. They also do less sightseeing on or off paved roads than backpackers and rock climbers do, but they fairly often backpack and hike.

Although motorcyclists (non-competitive) use campgrounds somewhat less often than other types of recreationists do, still, over half of them use one or the other types of campgrounds. Many of them use four-wheel drive vehicles as do horseback riders. Most dunebuggyers also use four-wheel drive vehicles.

Birdwatchers use mainly developed campgrounds, and do much of their sightseeing on paved roads. Many of them hike, but fewer backpack. They seldom use four-wheel drive vehicles, and very seldom engage in target shooting.

Rock and mineral collectors most often stay in developed campgrounds, they hike but less often backpack, and they very often engage in sightseeing both on and off paved roads. Many of them use four-wheel drive vehicles.

TABLE II-3

FACILITATIVE SERVICES USED BY THOSE ENGAGING IN MAJOR ACTIVITIES IN THE CALIFORNIA DESERT

	ACTIVITIES											
	Hiking	Photography	Rock climbing	Motorcycle riding (non-comp.)	Backpacking	Target shooting	Rock & mineral collect.	Four-wheel driving	Horseback riding	Hunting	Dune-buggying	Bird-watching
FACILITATIVE SERVICES:												
Camping-developed sites	62%	48%	63%	52%	64%	49%	63%	51%	55%	73%	50%	62%
Camping-undeveloped sites	62	36	68	50	66	51	48	57	48	61	67	30
Sightseeing and exploring	62	62	68	49	58	48	76	50	60	68	46	65
Sightseeing/driving on roads	63	76	64	52	65	58	71	58	56	58	55	81
Picnicking	57	50	61	46	58	50	59	44	64	54	34	46
Backpacking	43	32	59	31	100	39	33	48	44	46	47	31
Hiking	100	49	74	34	74	36	56	45	56	49	52	51
Target shooting	18	18	30	33	33	100	19	29	18	65	47	13
Educational activities	27	27	31	12	33	19	30	16	25	33	24	35
Four-wheel driving	16	13	24	31	29	21	23	100	27	18	64	11
Percent of all visitors who have done this:	24%	24%	14%	14%	14%	12%	9%	8%	8%	7%	6%	4%

D. Characteristics of Desert Use

Table II-4 shows the sex, age, and educational characteristics of Desert users who engage in various of the major activities that were studies in this survey.

Males quite definitely predominate in activities such as photography, target shooting, hunting, backpacking, and rock-climbing. Males are also more likely to engage in sightseeing and exploring and camping in undeveloped sites.

Women, on the other hand, predominate in such activities as horseback riding and picnicking.

Persons under 30 years of age are in the clear majority of those who engage in rock climbing, motorcycle riding, horseback riding, and backpacking. People 60 and older are most often found among those doing rock and mineral collecting, birdwatching, driving for pleasure on roads, picnicking, and taking part in educational activities.

Activities associated with the highest levels of education include birdwatching, photography, exploring, rock climbing, target shooting, and camping at undeveloped sites.

(Characteristics of persons engaging in activities mentioned by fewer than 4% of Desert visitors are not shown because the sample size becomes too small to be reliable.)

TABLE II-4

CHARACTERISTICS OF PERSONS ENGAGING
IN MAJOR ACTIVITIES IN THE DESERT

	Percent of visitors who do this	Percent male	Percent Under 30	30-59	60 and older	Percent with one or more years college
Sightseeing and driving--roads	46%	48%	35%	50	15	61%
Sightseeing and exploring	32%	60%	37%	51	12	72%
Picnicking	31%	46%	36%	49	15	60%
Camping--developed sites	29%	51%	30%	60	10	54%
Hiking	24%	58%	41%	50	9	68%
Photography	24%	71%	41%	53	6	74%
Camping--undeveloped sites	23%	58%	50%	44	6	70%
Rock climbing	14%	60%	62%	37	1	73%
Motorcycle riding (non-competitive)	14%	56%	62%	37	1	68%
Back packing	14%	65%	55%	45	-	66%
Target shooting	12%	69%	54%	42	4	72%
Educational activities	11%	51%	40%	46	14	68%
Rock and mineral collecting	9%	57%	40%	40	20	69%
Four-wheel driving	8%	46%	53%	38	9	68%
Horseback riding	8%	40%	58%	36	6	63%
Hunting	7%	69%	50%	44	6	59%
Dunebuggying	6%	47%	50%	48	2	61%
Birdwatching	4%	55%	36%	39	25	74%

E. Changes in Activity Patterns Since Two Years Ago

Respondents who had visited the Desert recently were asked to designate the things they had done two years ago. Comparing those answers with the activities they said they had done most recently, it is possible to get an idea of which activities may be increasing or declining in popularity. Table II-5 shows the comparative figures. It appears that there may have been some increase in pleasure driving, exploring, and picnicking, and photography in the desert compared with two years ago, but since nearly all activities show a higher level of mention now, this may reflect some memory lapse rather than a real increase in activity levels and caution should be used in interpreting these figures.

F. Expected Behavior Three Years Hence

Desert visitors within the past year or so were also asked to say what activities they might be doing three years from now in the Desert. Comparing the present activity pattern with expected behavior provides some indication of possible future demand for service. Looking at the responses shown in Table II-5, some activities show a higher rate of mention, indicating possible increases in future usage. These include backpacking, water based activities on the Colorado River, rock and mineral collecting, horseback riding, hunting, dunebuggying, painting, prospecting, scientific research, sand sailing, and hang gliding.

Table II-5

ACTIVITIES IN WHICH DESERT VISITORS ENGAGED IN THE PAST AND WHICH THEY PLAN TO DO IN THE FUTURE

Activity:	Have done in past year or so	Did this two years ago	Expect to do this three years from now
Sightseeing and driving for pleasure on paved roads	46%	35%	38%
Sightseeing and exploring	32	24	32
Picnicking	31	23	27
Camping in developed campground	29	26	35
Hiking	24	18	26
Photography	24	13	27
Cmaping at undeveloped sites	23	18	28
Motorcycle riding (non-competitive)	14	11	14
Backpacking	14	12	21
Rock climbing	14	9	13
Water based activities on Colorado River	12	13	24
Target shooting	12	9	14
Educational activities	11	8	12
Rock and mineral collecting	9	9	13
Horseback riding	8	6	18
Four-wheel driving	8	6	18
Water based activities on Salton Sea	6	6	9
Hunting	7	9	11
Dunebuggying	6	4	11
Birdwatching	4	3	7
Painting	3	2	5
Prospecting as a hobby	3	2	7
Scientific research	1	1	3
Motorcycle riding (competitive)	1	2	2
Sand sailing	1	1	5
Hang gliding	1	*	7
None of these	23	28	16
Did not live in Calif. 2 years ago	6	6	6
Do not plan to live in Calif. 3 years from now	1	1	1

* *Less than 0.5%.*

III.

ATTITUDES ABOUT THE QUALITY OF THE DESERT EXPERIENCE

A. Activities People Find Objectionable

The things which the largest numbers of people find objectionable on the Desert are predominantly motorized activities, such as motorcycling and dunebuggying, and activity involving firearms. Table III-1 shows the frequency with which various activities were cited as objectionable by visitors and non-visitors to the Desert. Here it will be noted that motorcycle riding (either competitive or recreational) is termed objectionable by 40% of all visitors, and by 30% of non-visitors. Dunebuggying is named by 31% of visitors and 22% of non-visitors. Target shooting and hunting are both named as objectionable by about 20% of both visitor and non-visitor groups. Four-wheel drive vehicles are also disapproved by 20% of visitors and 14% of non-visitors. No other activities are mentioned with such high frequency.

TABLE III-1

ACTIVITIES WHICH PEOPLE FIND OBJECTIONABLE ON THE DESERT

Activity:	Percent who say this activity would be particularly objectionable or would detract from their recreation or enjoyment of the Desert	
	Of those who have visited Desert within past year or so	Of those who have not visited Desert recently
Motorcycle riding (non-competitive)	38%	30%
Motorcycle riding (competitive)	36	29
Dunebuggying	31	22
Target shooting	20	22
Hunting	21	15
Four-wheel driving	20	14
Sand sailing	5	6
Hang gliding	4	5
Camping at undeveloped sites	6	3
Sightseeing and driving for pleasure on paved roads	3	3
Camping in developed campground	1	3
Rock climbing	3	2
Water based activities on Colorado River	2	1
Water based activities on Salton Sea	2	1
Rock and mineral collecting	2	1
(No other activities named by more than 1%)		
None of these	37%	50%

NOTE: Activities add to more than 100% because of multiple responses.

B. What People Want More Of or Less Of in the Desert

The things that the great majority of people are united in wanting to see more of in the desert are --

-- Protection of desert wildlife

-- Protection of desert scenery and natural character

-- Protection of areas of historic and archeological significance

Each of these things is approved by two-thirds or more of the people who have visited the Desert recently, and by the majority of those who have not visited the Desert. There is virtually no sentiment at all for any less emphasis on these things.

Also strongly favored with little or no opposition are such other things as --

-- More developed campgrounds

-- More control over public use of the desert

-- More primitive areas

-- Education and interpretive programs

However, energy development on the Desert (gas, oil, solar, geothermal) encounters considerable resistance, even though it is approved by a plurality. More Mining is also quite strongly opposed by those with an opinion, although a majority have no opinion about this.

Organized recreational facilities, such as amusement parks and sports facilities, are opposed by significant numbers of people. Although they get approval by a majority of those with an opinion, this is well short of a majority of all people.

More commercial developments such as motels and restaurants are vetoed by a substantial plurality, especially among people who have been to the Desert recently.

More roads gets a mixed reaction: a majority have no opinion about it, but a majority of those who do have an opinion favor the idea. However, roads specifically for four-wheel drive use are opposed by as many as approve of them. Open areas for off-road vehicles are disapproved by a majority of those offering an opinion.

TABLE III-2

ACTIVITIES WHICH PEOPLE SAY THEY WOULD LIKE
TO SEE MORE OF OR LESS OF IN THE DESERT

	Percent who would like to see--			
	More of this	Less of this	Eliminate this	Same amount or no opinion
Protection of desert wildlife and ecology				
Have Visited Desert	79%	1	*	20
Have Not Visited	73%	1	1	25
Protection of desert scenery and natural character				
Have Visited Desert	71%	2	*n.a.*	27
Have Not Visited	57%	1	*n.a.*	42
Protection of areas of historic and archeological importance				
Have Visited Desert	68%	1	*n.a.*	31
Have Not Visited	52%	*	*n.a.*	48
Developed campgrounds				
Have Visited Desert	56%	8	1	35
Have Not Visited	51%	8	3	38
Control over recreational and other public use of the Desert				
Have Visited Desert	53%	10	3	34
Have Not Visited	52%	8	1	39
Primitive areas				
Have Visited Desert	53%	3	*	43
Have Not Visited	45%	7	1	47
Educational or interpretive programs				
Have Visited Desert	47%	3	*n.a.*	50
Have Not Visited	33%	2	*n.a.*	65
Energy development, such as gas and oil wells, geothermal, solar, etc.				
Have Visited Desert	35%	27	*n.a.*	38
Have Not Visited	30%	18	*n.a.*	52

(continued)

TABLE III-2 (cont'd)

	Percent who would like to see--			
	More of this	Less of this	Eliminate this	Same amount or no opinion
Places for organized recreation (amusement parks, sports facilities,etc.)				
Have Visited Desert	37%	24	*n.a.*	39
Have Not Visited	24%	22	*n.a.*	54
Roads for 4-wheel drive use				
Have Visited Desert	28%	21	9	42
Have Not Visited	23%	20	11	46
Open areas for use of off-road vehicles like dunebuggies and motorcycles				
Have Visited Desert	27%	30	12	31
Have Not Visited	19%	25	14	42
Roads				
Have Visited Desert	30%	18	*n.a.*	52
Have Not Visited	20%	16	*n.a.*	64
Commercial development such as motels and restaurants				
Have Visited Desert	19%	48	*n.a.*	33
Have Not Visited	17%	33	*n.a.*	50
Mining				
Have Visited Desert	11%	29	*n.a.*	60
Have Not Visited	11%	20	*n.a.*	69

NOTE: "n.a." designation indicates that the answer category "eliminate" was not offered to respondents for these items.

* *Less than 0.5%.*

C. Factors Which Affect Scenic Enjoyment

Desert visitors and non-visitors alike join in believing that the scenic beauty of the Desert is adversely affected by nearly all man-made structures. For example, a majority feels that these things have a negative effect on the Desert scenery --

-- Electrical transmission lines

-- Power generating plants

-- Ditches for underground pipelines

-- Off-road vehicular activities

-- Mining activities

On the other hand, a majority of people feel that mountain top communications sites have no effect on Desert aesthetics, and grazing activities also are felt to have no effect, or possibly even a positive effect on scenic values.

TABLE III-3

PERCEPTIONS OF HOW CERTAIN STRUCTURES
AFFECT ENJOYMENT OF DESERT SCENRY

Feature:	Percent who say they believe this would have the indicated effect on their enjoyment of Desert scenery				
	Strong negative	Slight negative	No effect	Positive effect	No opinion
Electrical transmission lines					
Have Visited Desert	21%	39	34	5	1
Have Not Visited	24%	28	39	5	4
Power generating plants					
Have Visited Desert	26%	33	35	6	*
Have Not Visited	25%	22	44	5	4
Visible marks of ditches that have been dug for underground pipelines					
Have Visited Desert	25%	27	41	6	1
Have Not Visited	25%	25	42	4	4
Off-road vehicular activities					
Have Visited Desert	27%	23	38	11	1
Have Not Visited	26%	19	42	8	5
Mining activities					
Have Visited Desert	20%	29	40	9	2
Have Not Visited	21%	19	47	8	5
Mountain top communication sites					
Have Visited Desert	4%	24	60	11	1
Have Not Visited	7%	16	60	12	5
Grazing activities					
Have Visited Desert	5%	13	63	17	2
Have Not Visited	5%	10	64	16	5

* *Less than 0.5%.*

D. Adjectives Chosen to Describe the Desert Experience

Table III-4 lists ten words and phrases that were presented to people for them to check which ones best described their own personal feeling about the Desert. Here it will be seen that words like "beauty", "nature", "solitude", "freedom" and "adventure" are the ones most often chosen. Non-visitors to the Desert place these words in the same rank order as visitors do, indicating that the image of the Desert is a fairly universal one regardless of degree of experience in it.

TABLE III-4
ADJECTIVES THAT PEOPLE CHOOSE TO
DESCRIBE THE DESERT EXPERIENCE

Word or phrase:	Percent choosing this word or phrase to describe the most important features of the Desert to them	
	Of those who have visited Desert within past year or so	Of those who have not visited Desert recently
Beauty	62%	56%
Nature	62	54
Solitude	54	44
Freedom	42	35
Adventure	34	30
Family togetherness	21	15
Alter routine of life	22	10
Companionship	6	4
Recognition	7	4
Accomplishment	2	2
Other (volunteered)	4	6
Don't know	1	12

NOTE: Percentages add to more than 100% because of multiple responses.

E. What People Fear About the Desert

The greatest number of people fear a breakdown of their automobile in the Desert. This is the concern of 69% of all visitors, and 63% of non-visitors. Next in level of concern is "unexploded shells and bombs", chosen by about 60% of the people as one of their strong concerns. "Flash floods", "unfenced mine shafts", and "snakes" were also chosen by 47% to 58% as things that would give them concern about their personal safety in the Desert. "Fear of other recreationists" is mentioned by 32% of visitors as a concern, and by 20% of those who have not been in the Desert recently.

Table III-5

CONCERNS FOR PERSONAL SAFETY IN THE DESERT

Hazards:	Percent expressing concern about personal safety regarding various possible hazards in the Desert	
	Of those who have visited Desert within past year or so	Of those who have not visited Desert recently
Car breakdown	69%	63%
Unexploded military shells and bombs	60	58
Flash floods	58	47
Unfenced, abandoned mine shafts	55	49
Snakes, insects, etc.	56	52
Getting lost	41	41
Fear of other recreationists	32	20
None of these	6	8
No opinion.	*	6

NOTE: Percentages add to more than 100% because of multiple responses.

* *Less than 0.5%.*

IV.

COMPARISON WITH RESULTS OF 1975 SURVEY

In November of 1975, the Bureau of Land Management sponsored a series of questions on the public's awareness of and attitudes toward the California Desert region. That survey contained some questions on desert usage and attitudes toward certain features of the Desert that are similar to questions contained on the present survey. A comparison of findings between the two surveys follows.

A. Visits to the Desert

In the 1975 survey, people were shown a map of the desert region marked with grid coordinates superimposed on various towns, parks, roads, and other features, and were asked the following question:

> Now, I have some questions on a different subject -- the California Desert. By this I mean the area shown on this map, which includes Bureau of Land Management lands, National Parks, State Parks, private resorts and recreation areas. Are there any areas on the map that you have visited for recreational purposes within the past year? Which ones?

In response to that question, 30% of the persons interviewed designated one or more of the places shown on the map.

In 1977, the questioning procedure was somewhat different. The respondents were first shown a standard road map of the desert area on which various different sectors were colored

to designate parks, towns and urban areas, the Salton Sea, and The Colorado River areas. Respondents then were given a card listing twenty-six different activities and were queried as follows:

> This card lists a number of activities that people can do in the California Desert. Which of these, if any, have you done in the California Desert during the past year?

Using this questioning approach, 35% of the cross-section of adults interviewed named one or more activities from the list. The somewhat greater incidence of Desert visitorship obtained in the 1977 survey approach may reflect the influence of the fact that respondents in the 1977 survey were not asked for specific map locations of activites, but, rather, were asked only to say what activities they had engaged in. A comprehensive list of activities was provided. The effect of this procedure may have been to encourage greater recall and to facilitate responding affirmatively about Desert visitorship.

B. Actitivities in the Desert

In both the 1975 and the 1977 survey, respondents were asked to name activities they had done in the Desert from a list of activities that was supplied. The 1975 list contained nineteen activities, the 1977 survey list contained twenty-six. Some of the items were identically worded on both lists, others were similar but not identical. Furthermore, in 1975, people were asked only to designate the activities they "had done or would like to do" in the Desert; in 1977, they were asked separately to name the things they had done, and then the things they would like to do.

Table IV-1 shows the comparative percentages of respondents naming the various activities that were common to the two surveys. Here it will be noted that while there are some variations in the absolute percentages of people designating the various activities, the rank order of the activities is very closely similar between the two surveys. These data illustrate the problem of projecting survey percentages to obtain numbers of visitors engaging in various activities: because of the high degree of variance in peoples' ability to recall specific activities and to place them within a given time frame, it is not possible to derive reliable visitor-number estimates from these survey data. The data do, however, appear to be reliable indicators of the relative popularity of activities.

Table IV-1

COMPARISON OF 1977 AND 1975 FINDINGS
ON DESERT ACTIVITIES RESPONDENTS SAID THEY WERE DOING OR WOULD LIKE TO DO

Item wording	1977	1975	Item wording
	%	%	
Sightseeing and driving for pleasure on paved roads	36	59	Sightseeing
Sightseeing and exploring	35	27	Pleasure driving
Picnicking	28	44	(same)
Photography	27	37	(same)
Camping-developed camp ground	30	54	Camping
Camping-undeveloped camp ground	22		
Hiking	25	36	(same)
Horseback riding	20	28	(same)
Backpacking	19	24	(same)
Rock climbing	12	23	(same)
Target shooting	10	20	(same)
Hunting	11	17	(same)
Motorcycle riding (non-competitive)	14	17	Motorcycle riding or play
Dunebuggying	12	13	(same)
Four wheel driving	11	14	Jeeping
Painting	5	12	(same)
Sand sailing	4	8	(same)
Motorcycle riding (competitive)	1	8	Motorcycle racing
Hang gliding	5	7	(same)

1977: This card lists a number of activities that people can do in the California Desert. Which of these, if any, have you done in the California Desert during the past year? Which of these activities in the California Desert that you have not done in the past year do you think you might like to do in the future? (26 items on list)

1975: This card contains a list of some different types of recreation activities that take place in the California Desert. Please tell me which of the things on this list, if any, you do or would like to do in the California Desert? (19 items on list)

C. Activities and Features Liked and Disliked

Another set of questions that was similar between the two surveys was a series designed to give people an opportunity to indicate what activities and features of the Desert they disliked and would like to see less of. In Table IV-2 are shown the questionnaire items that were common to the two surveys. In 1977, the question was asked in terms of whether people would like to see "more of" or "less of" each activity; in 1975, the question was worded to ask people to designate which ones they thought were "most important" and which were "least important." The comparisons in Table IV-2 show two comparisons: (1) the percentage of 1977 respondents answering "would like to see less of this", and the percentage in 1975 answering "this is least important", and (2) the percentages in 1977 saying "more of" compared with the percentage in 1975 saying "most important."

As in the previous comparison, there are some differences in levels of absolute percentages, but the rank ordering of negative and positive priorities is substantially the same in 1977 as it was in 1975.

Table IV-2

COMPARISON OF 1977 AND 1975 FINDINGS ON DESERT USES AND FEATURES THAT PEOPLE SAY THEY WOULD LIKE TO SEE LESS OF OR FEEL ARE LEAST IMPORTANT

1977 Item Wording	1977 Would like to see less of	1975 Least Important	1977 Would like to see more of	1975 Most Important	1975 Item wording
	%	%	%	%	
Commercial developments such as motels and restuarants	39	56	18	10	Motels and eating places
Places for off-road vehicles like dunebuggies and motorcycles	33	45	24	11	(same)
Mining	24	19	11	11	More development of mineral resources
Places for organized recreational (amusement parks, sports facilities, etc.)	23	28	30	15	(same)
Roads	17	19	24	14	More roads and sightseeing places
Control over recreational and otherpublic use	9	5	42	22	(same)
Camp grounds	6	10	46	29	(same)
Educational or interpretive programs	2	14	40	17	More educational programs
Protection of desert wildlife and ecology	1	10	67	54	(same)
Protection of areas of historic and archeological importance	*	4	59	39	(same)

* *Less than 0.5%.*

APPENDICES

HOW THE SURVEY WAS CONDUCTED

Survey Universe

All California adults aged 18 or older who reside in residential dwelling units. (Persons residing in transient quarters and persons with no established place of residence are excluded. Personnel residing on military bases and inmates of institutions are also excluded from the sampled universe.)

Sample Size

Total of 1058 persons; 514 males and 544 females.

Date of Field Work

September 23 through October 10, 1977.

Method of Interview

Personal, in-home.

Sample Design

FieldScope utilizes Field Research Corporation's statewide Master Sample, a design which has been in use for more than 10 years and has proven itself to be an accurate and reliable representation of the state's population. It is a probability sample design, based on a procedure developed by the late J. Stevens Stock and Jerome Green, two of the country's foremost survey statisticians.

The current sample design consist of 120 primary sampling areas selected across the state with probability in proportion to population. Two clusters of interviews are conducted within each primary sampling point. Specific cluster locations are determined by random selection of key address from current telephone directories. Non-telephone homes are drawn into the sample by a special method of cluster formation and are fully accounted for in the final sample by a special weighting procedure described below.

New interviewing locations and a fresh sample of respondents are designated for each survey.

Households are selected by means of a systematic counting interval to insure that the interviewer exerts no influence on the selection of households to be included in the cluster. Within households, a systematic selection procedure is used by the interviewer to provide a balance of respondents by age and sex that closely approximate the age/sex distribution of the population as a whole.

Interviewing is conducted during afternoon and early evening hours on weekdays, and on weekend days. Interviewers make up to three attempts to obtain an interview if necessary by calling on different days at different times on households selected for the sample.

Interviewing Staff

Interviews were conducted by experienced members of Field Research Corporation's trained interviewing staff. Each interviewer was thoroughly trained by full-time staff members, and a portion of each interviewer's work was validated by supervisor call-back.

Data Processing

Each questionnaire was systematically reviewed for completeness and consistency. Open-end questions were coded by staff specialists. The coded questionnaire data were transferred to punched data cards and processed by computer. Coding, keypunching, and computer processing were subjected to quality control checks to insure accuracy.

Sample Weighting

When the questionnaire data had been entered in the computer, the data set was subjected to a two-stage statistical weighting procedure whose purpose is to provide an unbiased, accurately projectable sample base. The first weighting stage adjusts for telephone density biases which occur when telephone directories are used for selecting cluster starting points. That is, areas with higher than average density of listed telephone addresses will be oversampled, while areas with lower proportions of residences having listed telephones will tend to be undersampled.

This bias is compensated for by giving each cluster of interviews a weight which is inversely proportional to the density of listed telephone homes found in that cluster during the interviewer's rounds: This procedure also equalizes unequal yields of interviews from cluster to cluster. The second stage of weighting is an adjustment to bring the interview sample (weighted for telephone density) into conformity with census-established population parameters for age x sex within statistical areas of the state. The resultant weighted sample base is the one utilized for all of the data reported for this study.

CD II

The next part of this questionnaire is being sponsored by the U.S. Department of the Interior, Bureau of Land Management and is about use of and attitudes toward the California desert as shown on this map. (SHOW RESPONDENT MAP)
Your answers to these questions will provide the Bureau with an understanding of how desert lands can best serve the public and be protected for future public use.

This part of the questionnaire takes approximately 10 minutes.

1. (SHOW CARD K) This card lists a number of activities that people can do in the California desert. Which of these, if any, have you done in the California desert during the past year? (RECORD BELOW)

(IF HAVE DONE ANY OF THESE ACTIVITIES -- FROM QUES. 1, ASK):

2. Which of these, if any, is your primary recreational activity in the desert --the one that is most important to you in the desert. (RECORD BELOW)

3. Which of these activities in the California desert that you have not done in the past year do you think you might like to do in the future? (PROBE) Any others?

4. Were you living in California more than two years ago? (IF NOT, RECORD BELOW) (IF YES, ASK): Which of these activities in the California desert did you do two or more years ago? (RECORD BELOW)

5. If you are still living in California about three years from now, which of these activities, if any, do you think you might do then in the California desert? (RECORD BELOW)

6. (ASK EVERYONE): Which of these activities, if any, do you find particularly objectionable, that is, things which detract from your own recreation or enjoyment of the California desert? (RECORD BELOW)

		Ques. 1 Have done in past year	Ques. 2 Primary activity	Ques. 3 Haven't done, would like to	Ques. 4 Did two years ago	Ques. 5 Will do in three years	Ques. 6 Find objectionable
A.	BACKPACKING	1	1	1	1	1	1
B.	BIRDWATCHING	2	2	2	2	2	2
C.	CAMPING IN DEVELOPED CAMPGROUND	3	3	3	3	3	3
D.	CAMPING AT UNDEVELOPED SITES	4	4	4	4	4	4
E.	DUNEBUGGYING	5	5	5	5	5	5
F.	EDUCATIONAL ACTIVITIES	6	6	6	6	6	6
G.	FOUR WHEEL DRIVING	7	7	7	7	7	7
H.	HANG GLIDING	8	8	8	8	8	8
I.	HIKING	9	9	9	9	9	9
J.	HORSEBACK RIDING	0	0	0	0	0	0
K.	HUNTING	1	1	1	1	1	1
L.	MOTORCYCLE RIDING (NON-COMPETITIVE)	2	2	2	2	2	2
M.	MOTORCYCLE RIDING (COMPETITIVE)	3	3	3	3	3	3
N.	PAINTING	4	4	4	4	4	4
O.	PICNICKING	5	5	5	5	5	5
P.	PHOTOGRAPHY	6	6	6	6	6	6
Q.	PROSPECTING AS A HOBBY	7	7	7	7	7	7
R.	SCIENTIFIC RESEARCH	8	8	8	8	8	8
S.	ROCK CLIMBING	9	9	9	9	9	9
T.	ROCK & MINERAL COLLECTING	0	0	0	0	0	0
U.	SAND SAILING	1	1	1	1	1	1
V.	SIGHTSEEING & EXPLORING	2	2	2	2	2	2
W.	SIGHTSEEING & DRIVING FOR PLEASURE ON PAVED ROADS	3	3	3	3	3	3
X.	TARGET SHOOTING	4	4	4	4	4	4
Y.	WATER BASED ACTIVITIES ON THE SALTON SEA	5	5	5	5	5	5
Z.	WATER BASED ACTIVITIES ON THE COLORADO RIVER	6	6	6	6	6	6
	HAVE BEEN TO DESERT IN PAST YEAR BUT HAVE NOT DONE ANY OF THESE ACTIVITIES	0					
	HAVE NOT BEEN TO DESERT IN PAST YEAR	X					
	NONE OF THESE		X	X	X	X	X
	DID NOT LIVE IN CALIFORNIA TWO YEARS AGO				Y		
	DO NOT PLAN TO LIVE IN CALIFORNIA 3 YEARS FROM NOW					Y	

CD II

7. (SHOW CARD L) This card lists a number of things that are now, or might be, in the California desert. Please study the items and tell me which ones you would like to see more of in the desert? (RECORD BELOW)

8. And which ones would you like to see less of in the California desert? (RECORD BELOW)

	Ques.7 Would like to see more of	Ques.8 Would like to see less of
A. PLACES FOR USE OF OFF-ROAD VEHICLES LIKE DUNEBUGGIES AND MOTORCYCLES	62 1	64 1
B. CAMPGROUNDS	2	2
C. ROADS	3	3
D. COMMERCIAL DEVELOPMENT SUCH AS MOTELS AND RESTAURANTS	4	4
E. PLACES FOR ORGANIZED RECREATION (AMUSEMENT PARKS, SPORTS FACILITIES, ETC.)	5	5
F. MINING	6	6
G. EDUCATIONAL OR INTERPRETIVE PROGRAMS	7	7
H. PROTECTION OF DESERT WILDLIFE AND ECOLOGY	8	8
I. PROTECTION OF AREAS OF HISTORIC AND ARCHEOLOGICAL IMPORTANCE	9	9
J. CONTROL OVER RECREATIONAL AND OTHER PUBLIC USE	0	0
K. PROTECTION OF DESERT SCENERY AND NATURAL CHARACTER	63 1	65 1
L. ENERGY DEVELOPMENT SUCH AS GAS AND OIL WELLS, GEOTHERMAL, SOLAR, ETC.	2	2
NONE OF THESE	X	X
DON'T KNOW/CAN'T SAY	Y	Y

9. (SHOW CARD M) Several more items are listed on this card. Please tell me if you would like to see more, less, about the same or the elimination of (ITEM) in the desert. (REPEAT FOR EACH ITEM.)

	See more	See less	See same	Eliminate	Can't say
A. PROTECTION OF DESERT WILDLIFE AND ECOLOGY	66 1	2	3	4	0
B. OPEN AREAS FOR USE OF OFF-ROAD VEHICLES LIKE DUNEBUGGIES AND MOTORCYCLES	67 1	2	3	4	0
C. CONTROL OVER RECREATIONAL AND OTHER PUBLIC USE OF THE DESERT	68 1	2	3	4	0
D. PRIMITIVE AREAS	69 1	2	3	4	0
E. DEVELOPED CAMPGROUNDS	70 1	2	3	4	0
F. ROADS FOR 4-WHEEL DRIVE USE	71 1	2	3	4	0

CDII

10. (SHOW CARD N) This card lists a number of words or phrases which some people might use to describe their experience in the California desert. Which two or three best describes what is most important to you about the desert? (PROBE) Are there any other words or phrases that aren't listed that you feel are especially descriptive of how you feel about the desert?

72'

A. SOLITUDE 1
B. ADVENTURE 2
C. COMPANIONSHIP. 3
D. FREEDOM 4
E. ACCOMPLISHMENT 5
F. BEAUTY 6
G. RECOGNITION 7
H. NATURE 8
I. FAMILY TOGETHERNESS. . . . 9
J. ALTER ROUTINE OF LIFE. . . 0

OTHER:_____
(specify)
OTHER:_____ X
(specify)
DON'T KNOW . . . . . Y

11. (SHOW CARD O) This card lists some things that might restrict a person's use of the California desert. Which of these, if any, do you feel are the most important things that keep you from using the California desert more than you do?

73'

A. COST OF TIME, TRAVEL, EQUIPMENT, ETC. 1
B. DISTANCE TO TRAVEL 2
C. OPPORTUNITIES TO DO THE SAME THINGS ELSEWHERE. 3
D. REGULATIONS ON THE USE OF PUBLIC LANDS 4
E. MORE IMPORTANT PERSONAL INTERESTS AND OBLIGATIONS. . . . 5
F. LOW PERSONAL INTEREST IN THE CALIFORNIA DESERT 6
G. CONFLICTS WITH OTHER RECREATIONISTS. 7
H. OTHER (SPECIFY) X
DON'T KNOW . . . . . Y

12. (SHOW CARD P) This card lists a number of things which might have an effect on the scenic quality of the desert. For each item listed, please tell me if it has any effect on your enjoyment of desert scenery. Select an answer category that best fits how you feel about each one.

	Strong negative	Slight negative	No effect	Positive effect
A. GRAZING ACTIVITES (74')	1	2	3	4
B. ELECTRICAL TRANSMISSION LINES (75')	1	2	3	4
C. POWER GENERATING PLANTS (76')	1	2	3	4
D. MINING ACTIVITIES (77')	1	2	3	4
E. OFF-ROAD VEHICULAR ACTIVITIES (78')	1	2	3	4
F. MOUNTAIN-TOP COMMUNICATION SITES (79')	1	2	3	4
G. VISIBLE MARKS OF DITCHES THAT HAVE BEEN DUG FOR UNDERGROUND PIPELINES (80')	1	2	3	4

(End Card 2)

FORM 1

(Start Card 3)
CD III

13. (SHOW CARD Q) Do you have a concern for your personal safety while in the desert regarding any of the things listed on this card?

		Have concern (12-)	No concern
A.	UNFENCED, ABANDONED MINE SHAFTS	1	X
B.	UNEXPLODED MILITARY SHELLS AND BOMBS	2	X
C.	FLASH FLOODS	3	X
D.	SNAKES, INSECTS, ETC	4	X
E.	CAR BREAKDOWN	5	X
F.	FEAR OF OTHER RECREATIONISTS	6	X
G.	GETTING LOST	7	X

(IF HAVE BEEN TO CALIFORNIA DESERT IN PAST YEAR--FROM QUES.1--ASK):

14. (SHOW CARD R & DESERT MAP) How many days, if any, during the past year did you spend in each of the areas listed on this card for recreational purposes? Do not include business trips, visits to friends or relatives, or traveling through to get somewhere else.

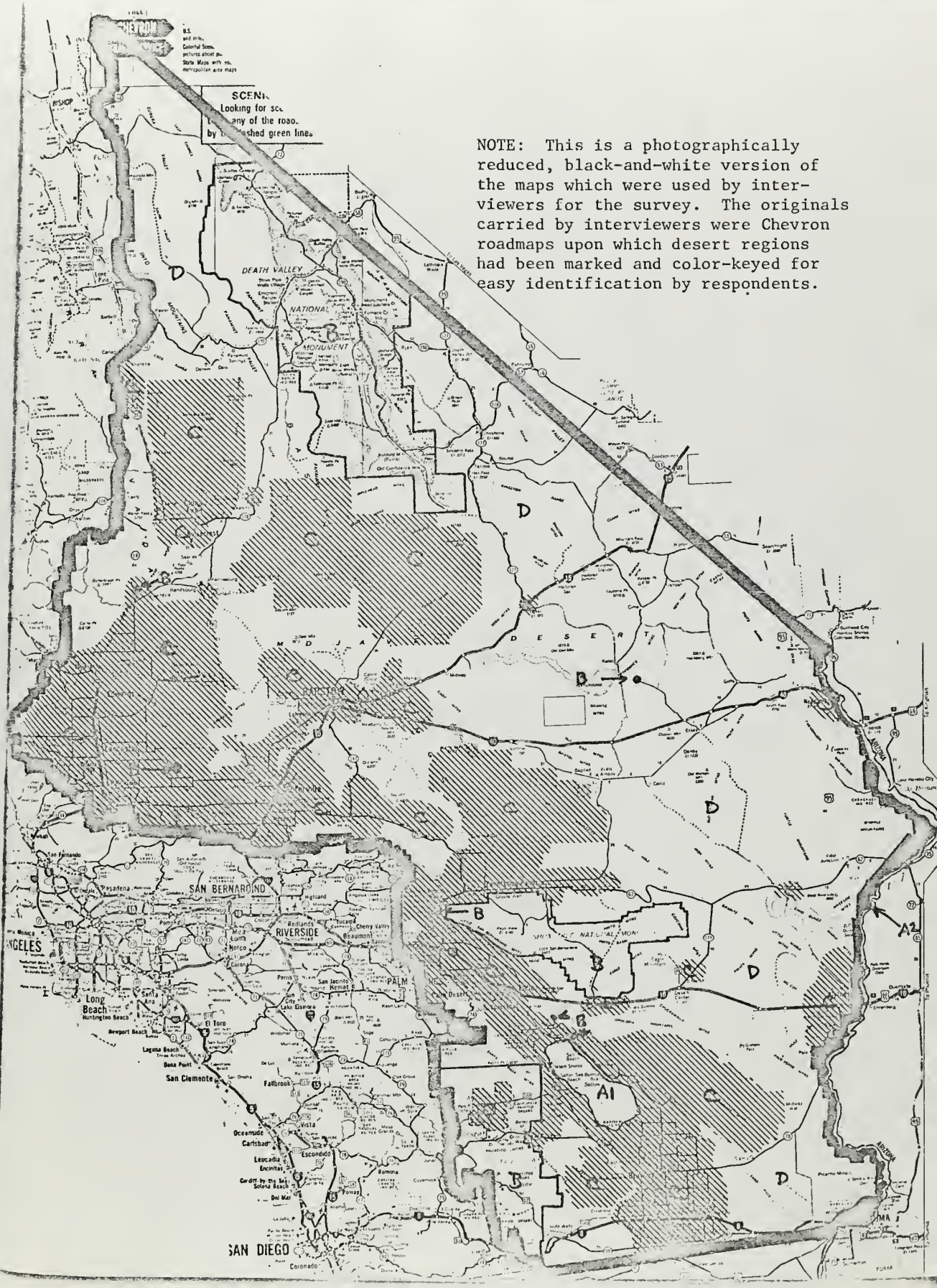
(IF HAVE VISITED ANY OF THESE AREAS, ASK):

15. Now, for each of the areas you visited for recreational purposes, please give me an estimate of the approximate amount of money you spent while there, including the cost of food, gas bought there, lodging, recreational equipment bought there, and so on. Just your best estimate -- the amounts don't have to be exact.

	Q.14 # of days spent	Q.15 Money spent
A1. SALTON SEA	(13-14)	23.
A2. COLORADO RIVER	(15-16)	24.
B. NATIONAL, STATE, OR COUNTY PARKS (e.g., DEATH VALLEY, JOSHUA TREE, ANZA-BORREGO, etc.)	(17-18)	25.
C. TOWNS, URBAN AREAS, PRIVATE DEVELOPMENTS, MILITARY BASES	(19-20)	26.
D. REMAINING DESERT AREAS (PUBLIC LANDS ADMINISTERED BY BUREAU OF LAND MANAGEMENT)	(21-22)	27.

INTERVIEWER: THERE IS NO PAGE 12 ON THIS QUESTIONNAIRE.

KEYPUNCH: SKIP COLS. 28-34



NOTE: This is a photographically reduced, black-and-white version of the maps which were used by interviewers for the survey. The originals carried by interviewers were Chevron roadmaps upon which desert regions had been marked and color-keyed for easy identification by respondents.